

WHAT IS CLAIMED IS:

1. A method for producing a container from a heated thermoplastic plastic film comprising

clamping a segment of the plastic film by closing a molding tool comprising an upper tool part and a lower tool part having an inner surface generally corresponding to the shape of the container to be formed;

forming the container from the clamped portion of the plastic film by differential pressure;

buckling the container floor by upward axial movement of the molding tool floor to produce a standing base for the container;

pressing the buckled container floor, around its perimeter, against an inwardly directed pinched edge disposed on the inner surface of the lower tool part by upward axial movement of a sealing bell that surrounds the periphery of the molding tool floor to seal the base;

creating an empty cylindrical space between the inside surface of the container standing base and the outside surface of the mold floor by the retraction and lowering of the sealing bell without retraction of the molding tool floor; and

after opening of the molding tool, pushing the standing base beyond the pinched edge by axial movement of the molding tool floor, thereby causing the standing base to yield resiliently in the direction of the outside surface of the mold floor, to eject the container from the lower mold part.

2. A molding tool for producing a container from a heated thermoplastic plastic film through deep drawing, the tool comprising

an upper tool part having a compressed-air supply;

a lower tool part having at least one blank punch and shaping parts, corresponding to the shape of the container to be produced, disposed within the blank punch;

an inwardly directed pinched edge extending around the inner wall of the shaping part adjacent to its lower end;

an axially displaceable mold floor for the lower tool part and the blank punch, and moveable between a first lowered position and a raised position above the pinched edge;

an axially displaceable sealing bell surrounding the periphery of the mold floor, and cooperating with the pinched edge when in a first raised position; and

a drive in operational connection with the sealing bell for displacement of the sealing bell relative to the mold floor.

3. The molding tool according to claim 2, wherein the mold floor and the sealing bell are guided axially relative to one another by a cylindrical fit of the floor into the bell.

4. The molding tool according to claim 2, wherein the drive acts on a retaining plate, with which all sealing bells of a multicavity molding tool are connected.

5. The molding tool according to claim 4, wherein the retaining plate is connected to a piston that is displaceable in a bore in a plate connected to a base plate for the lower part of the tool.

6. The molding tool according to claim 2, wherein the mold floor is attached to a rod that is connected to an ejector plate, which is connected to all such rods of a multicavity molding tool, for selectively axially moving the mold floor.

7. The molding tool according to claim 6 wherein the rod is rigidly connected to the ejector plate.

8. The molding tool according to claim 6 wherein the rod is rigidly connected to a carrier plate, to which all rods of a molding cavity tools are connected, that is axially displaceable relative to the ejector plate.

9. The molding tool according to claim 8, wherein the carrier plate is connected to a piston that is axially displaceable in a bore in a shoulder secured to the ejector plate.

10. The molding tool according to claim 2, wherein the shaping part comprises a mold insert having the pinched edge and disposed within the blank punch that has a cutting edge.

11. The molding tool according to claim 2 wherein the blank punch has a cutting edge and the blank punch and the shaping parts are integrally formed as one piece.

12. The molding tool according to claim 2, wherein the shaping parts comprise a mold insert and a ring having the pinched edge disposed within the blank punch having a cutting edge.

13. The molding tool according to claim 12, wherein the ring comprises hardened steel.